



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,945	09/20/2001	Toru Kamiwada	1405.1049	9962
21171	7590	05/25/2006	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			DINH, MINH	
			ART UNIT	PAPER NUMBER
			2132	

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/955,945

Applicant(s)

KAMIWADA ET AL.

Examiner

Minh Dinh

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/4/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This action is in response to the RCE/amendment filed 03/10/2006. Claims 1, 11, 18 and 22 have been amended; claims 23-24 have been added.

Response to Arguments

2. Applicant's arguments filed 03/10/2006 have been fully considered but they are not persuasive. Applicant argues that Holmes does not disclose a home network on which the devices are connected (see last page of the response section). Holmes discloses that the personal base station is connected to "a vast array of devices including a home security system, lights, various household appliances and subsystems within the house such as the heating and cooling system" (col. 3, lines 24-29). Holmes further discloses implementing home automation system using CEBus communications protocol to monitor and control devices in a house (col. 3, lines 38-50). CEBus standard is a home network standard; therefore, the home automation system disclosed by Holmes is a CEBus home network on which the home devices and appliances are connected.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-9 and 11-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 1, it recites the following limitations:

- "a device control server interconnected over a wired and/or wireless home network" (lines 2-3). The specification original filed discloses a device control server that is interconnected over a wired or wireless home network (page 4, last paragraph); however, the specification original filed does not disclose a device control server that is interconnected over a wired and wireless home network.

Therefore, the limitation is considered new matters.

- "a single operating terminal capable of wired and/or wireless transmission of instruction signals" (line 4). The specification

original filed discloses that the operating terminal is capable of either wired or wireless transmission of instruction signals (page 4, last paragraph); however, the specification original filed does not disclose a single operating terminal that is capable of both wired and wireless transmission of instruction signals. Therefore, the limitation is considered new matters.

- “plurality of devices connected on the wired and/or the wireless home network” (lines 9-10). The specification discloses that a plurality of devices are connected on the wired or the wireless home network (page 14, lines 5-11); however, the specification original filed does not disclose that a plurality of devices are connected on the wired and the wireless home network. Therefore, the limitation is considered new matters.

Claims 11, 18 and 22-23 are rejected on the same basis as claim 1.

Claims that are not specifically addressed are rejected by virtue of their dependency.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 9, 11 and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Holmes (5,875,395). Regarding claim 1, which is exemplary of claims 9, 11 and 23, Holmes discloses an access restriction method for a device control system comprising a device control server interconnected over a CEBus home network with a plurality of different types of devices within a home (fig. 1, elements 12, 26 and corresponding text; col. 3, lines 38-50), and an operating terminal capable of wired or wireless transmission of instruction signals relating to operation of plurality of devices connected to the CEBus home network (fig. 1, elements 10, 24), said method comprising: accepting instruction information including said operating terminal identifier and said instruction signals relating to operation of said plurality of devices (fig. 5, step 52); determining said operating terminal access right based on said operating terminal identifier included in said instruction information (fig. 5, step 54); and controlling said plurality of devices based on said operating terminal access right and said signal instructions relating to said plurality of different types of devices (fig. 5, steps 58-66). Holmes does not explicitly disclose the step of accepting registration of terminal information for associating a unique identifier established for said operating terminal with said operating terminal access

right for accessing the one or more devices. However, this feature is deemed to be inherent to the Holmes method as lines 1-17 of column 3 show that the device control server uses stored information to authenticate and authorize the operating terminal. The Holmes method would be inoperative if the server did not accept registration of terminal information for associating a unique identifier established for said operating terminal with said operating terminal access right. Regarding claim 22, Holmes teaches that the operating terminal controls said one or more devices by sending out commands to the one or more devices; the teaching meets the limitation of the operating terminal directly controlling said one or more devices with signals transmitted from said terminal.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2-3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes as applied to claims 1 and 11 above; and further in view of Buffam (6,185,316). Holmes discloses using a challenge-response

scheme based on symmetric-key cryptography between the server and the terminal (col. 1, lines 50-67). Holmes does not teach using a challenge-response scheme based on a public-key cryptography. Buffam discloses using a challenge-response scheme based on a public-key cryptography and that the public key is part of the identity of an entity and should be made known to other entities (col. 5, lines 45-54; col. 6, lines 18-29). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Holmes method to use a challenge-response scheme based on a public-key cryptography, as taught by Buffam. The motivation for doing so would have been that no secret information had to be shared by the entities involved in the exchange. Accordingly, the server receives the public key of the terminal as part of the registration information.

9. Claims 4-6 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes as applied to claims 1 and 11 above, and further in view of Sizer, II et al (6,021,324). Holmes discloses that the server verifies the terminal's access right when receiving instruction information from the terminal. Holmes does not disclose that the server is connected to an external network from which electronic information is acquired and that the information is stored at the server and then presented. Sizer discloses a

system for controlling appliances within a home including a control server, the server is connected to an external network from which electronic information is acquired and that the information is stored at the server and then presented (col. 2, lines 30-42; col. 6, lines 21-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Holmes method such that the server is connected to an external network from which electronic information is acquired and that the information is stored at the server and then presented, as taught by Sizer. The motivation for doing so would have been that electronic content could be downloaded from a cable company for use at the premises. Accordingly, access to the external server and the electronic information is control by access right of the terminal.

10. Claims 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes as applied to claims 1 and 11 above, and further in view of Muhonen (6,751,472). Holmes does not disclose that the access right of the operating terminal is determined based on whether the operating terminal is located inside or outside the house. Muhonen discloses that different access rights are applied depending on the location of a mobile terminal whether it is located inside a house (col. 5, lines 33-51). It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the Holmes method such that the access right of the operating terminal is determined based on whether the operating terminal is located inside or outside the house, as taught by Muhonen. The motivation for doing so would have been to extend the capabilities of the operator to offer different services depending on the location of the subscriber.

11. Claims 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes as applied to claims 1 and 11 above, and further in view of Dugan (6,779,030). Holmes discloses authenticating the terminal. Holmes does not disclose authenticating the user of the terminal. Dugan discloses authenticating the terminal and authenticating the user of the terminal using a user's information (col. 67, lines 49-54). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Holmes method to also authenticate a user of the terminal using the user's information, as taught by Dugan. The motivation for doing so would have been that only authorized users are allowed to operate the terminal. Accordingly, the server receives the user's registration information as part of the registration information.

12. Claims 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes in view of Yatsukawa (6,148,404). Holmes

discloses an operating terminal that in a device control system having a device control server interconnected over a wired or wireless home network with one or more devices within a home, sends instruction signals relating to operations of said one or more devices (fig. 1, elements 10, 12, 26), comprising: identifier storage means storing a unique identifier (col. 1, lines 56-58); input acceptance means for accepting input of instructions relating to operation of said one or more devices (fig. 1, element 10); instruction information generation means for generating instruction information based on inputted instructions accepted by said input acceptance means and on an identifier stored in said identifier storage means; and instruction information transmission means for wired or wireless transmission of instruction information generated by said instruction information generation means (fig. 5, step 52-58). Holmes further discloses using a challenge-response scheme based on symmetric-key cryptography between the server and the operating terminal (col. 1, lines 50-67). Holmes does not teach using a challenge-response scheme based on a public-key cryptography. Yatsukawa discloses using a challenge-response scheme based on a public-key cryptography, in which a terminal first registers its identifier and public key with a server, encrypts a predetermined value with its private key and sends the encrypted value to the server for authentication (figures 13-14; col. 20, lines 39-55). It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the Holmes method to use a challenge-response scheme based on a public-key cryptography, in which a terminal first registers its identifier and public key with a server, encrypts a predetermined value with its private key and sends the encrypted value to the server for authentication, as taught by Yatsukawa. The use of public-key cryptography is indispensable to satisfy all conditions of a digital signature (col. 3, line 66 – col. 4, line 11).

13. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes in view of Yatsukawa as applied to claim 18 above, and further in view of Muhonen. Holmes discloses generating instruction information based on said inputted instruction and said identifier (fig. 5). Holmes does not disclose using location information. Muhonen discloses that different services are offered depending on the location of a mobile terminal (col. 5, lines 33-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Holmes terminal to use its location information, as taught by Muhonen. The motivation for doing so would have been to extend the capabilities of the operator to offer different services depending on the location of the subscriber.

14. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes in view of Yatsukawa as applied to claim 18 above, and further in view of Dugan. Holmes discloses using the terminal identifier to authenticate the terminal. Holmes does not disclose using a user's information to authenticate the user of the terminal. Dugan discloses authenticating the terminal and authenticating the user of the terminal using a user's information (col. 67, lines 49-54). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Holmes method to also authenticate a user of the terminal using the user's information, as taught by Dugan. The motivation for doing so would have been that only authorized users are allowed to operate the terminal.

15. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes as applied to claim 22 above, and further in view of Davidson ("CEBus: A New Standard in Home Automation"). Holmes discloses that one of the devices is a cooling system (col. 3, lines 24-29). Holmes does not disclose that the devices include a TV set. Davidson discloses that devices in a home automation system include a TV set (see CEBUS, pages 40-41; A CEBus Demonstration, pages 50-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Holmes system to such that it includes a TV set, as taught by Davidson. The

Art Unit: 2132

motivation for doing so would have been to provide remote control of the TV set together with other household devices using a single standard.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wacks, "Introduction to the CEBUS Communications Protocol"

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dinh whose telephone number is 571-272-3802. The examiner can normally be reached on Mon-Fri: 10:00am-6:30pm.

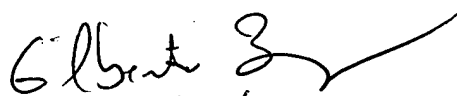
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MD

Minh Dinh
Examiner
Art Unit 2132

MD
05/19/06


GILBERTO BARRON JR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100